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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,691	12/17/2001	Richard Joseph Caballero	SBL0020US	2964
66/975 7590 03/16/2009 CAMPBELL STEPHENSON LLP 11401 CENTURY OAKS TERRACE BLDG. H, SUITE 250 AUSTIN, TX 78758				
EXAMINER CHENCINSKI, SIEGFRIED E				
ART UNIT 3695		PAPER NUMBER		
MAIL DATE 03/16/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/024,691

Applicant(s)

CABALLERO ET AL.

Examiner

SIEGFRIED E. CHENCINSKI

Art Unit

3695

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 4, 2008 has been entered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claims 50-63 are rejected** because the claimed invention is directed to non-statutory subject matter. Independent claim 50 is not directed to any one of the areas of patentable subject matter, such as product, process, process of making or composition. Claims 51-63 are rejected because of their dependence on independent claim 50. For a claim to be statutory under 35 USC 101 the following condition must be met:

1) In the claim, the practical application of an algorithm or idea results in a useful, concrete, tangible result.

According to the above guidelines, Applicant's claims are limited to the manipulation of abstract ideas in the context of patentability because the claim lacks an indication of usefulness. The amended independent claims still do not result in an action but merely in a software program which does not meet the requirements of patentable subject

matter, such as product, process, process of making or composition under 35 USC 101. Software does not represent a useful, concrete, tangible result under this statute.

3. Claims 50-63 are rejected because independent claim 5, a method claim, fails the transformation branch test of 35 USC 101. Claims 51-63 are rejected due to their dependence on independent claim 50.

The en banc decision by the federal Circuit court in *In re Bilski*, dated October 31, 2008 opined that transformation of a real object is required in a method claim. (The machine-or-transformation test is a two-branched inquiry; an applicant may show that a process claim satisfies § 101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article. See Benson, 409 U.S. at 70. Certain considerations are applicable to analysis under either branch. First, as illustrated by Benson and discussed below, the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility. See Benson, 409 U.S. at 71-72. Second, the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity. See Flook, 437 U.S. at 590.). In the instant claim only data is transformed. No real object is transformed. The object language in the claim represent computer programming code language, not a real object.

Applicant is advised to satisfy the statutory requirements for the claims. Applicant is also advised not to add any new matter to the specification or the claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 51-63 are rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a clearly asserted utility or a well established utility for the reasons set forth above in the rejection of the claims under 35 USC 101, one skilled in the art clearly would not know how to use the claimed invention.

4. Claims 1-63 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A clear set of system and method steps leading to the processing of an order, critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The lack of clarity is based on the conditional logic in the limitations of the independent claims and the lack of a potential result in a processed order. The dependent claims are rejected due to their dependence on the rejected independent claims.

Ambiguity is caused to a large extent due to the use of programming language instead of standard business language in the specification and the claims which the ordinary practitioner would use. This is exemplified by the last limitation in claim 50 which recites "transforming at least a portion of the business object into a complex object.". The specification fails to contain a clear definition of the expression "business object" and "complex object ". The preamble leads one to expect that these steps relate to a processed order.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-63 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1, 19, 36 and 50 fail to correspond in scope with that which applicant(s) regard as the invention can be found in the specification filed December 17, 2001. In that paper, applicant has stated the invention has the purpose of processing complex orders which include complex services and products, and this statement indicates that the invention is different from what is defined in the claim(s) because the independent claims do not include a limitation which indicates processing of orders. Further, the limitations in the independent claims do not guarantee the processing of an order as

stated in the preambles. The three conditional choices provide options which do not lead to the processing of an order two out of three of the options.

6. Claims 1-63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For example, the limitation "at least one business service method performs a function associated with the selected option" in independent method claim 50 is vague and indefinite. Independent claims 1, 19 and 36 contain similar enabling limitations (Claim 1 – "the at least one of the plurality of workflow processes is configured to invoke at least one of the plurality of business service methods to perform a function associated with the selected option."; Claim 19 – "generate a business object based on the portion of the service profile; and a transformation engine wherein the transformation engine is configured to generate at least a portion of the complex object, and the transformation engine is further configured to perform the generation using the business object."; Claim 36 – "the means for invoking the workflow process comprises a means for invoking at least one of the plurality of business service methods and the at least one of the plurality of business service methods is configured to perform a function associated with the selected option; means for receiving at least one of a service profile, quote information, and order information pertaining to an account from an external server; means for generating a business object".

7. Claims 1-63 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are the steps needed to explicitly deliver the result of a processed order as stated in the preambles to the independent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. EXAMINATION NOTES:

a. Applicant's claims and the supporting specification are written in programming terminology (apparently using C++). Computer software is a matter of copyright, not patentability. Such application software has copyright protection and their use is sold and purchased under licensing agreements. Using independent method claim 50 as an example, the claims contain terminology such as "invoking a workflow process", "generating a business object", and "transforming at least a portion of the business object into a complex object" as the final result of method claim 50. Such terminology only speaks to the underlying software system but fails to add substance to the claimed limitations. The only exceptions are the preambles of the independent claims, which use more straight forward commonly understood business language, such as in claim 50, "A method for processing orders comprising". However, most of the analogous prior art uses more commonly understood English expressions, leaving the programming out of the invention and stating that a number of programming languages can be used to construct the computer automating software. For examination purposes the examiner has the right and obligation to use equivalent language in order to search for and apply the prior art. This is what the examiner has done in prosecuting this application.

- b. Use of programming terminology in the claims does not create patentable novelty, especially when other equivalent language is suitable and viable in defining a claimed limitation.
- c. The examiner has searched the specification for clear definitions which an applicant has the right to make use of within reasonable limits to be his own lexicographer. However, the examiner has been unable to find such clear definitions which would make the claims terminology understandable to the ordinary practitioner attempting to make use of Applicant's invention and to help the examiner clearly understand the claimed inventions. This has made the examiner to make assumptions guided by the preambles to the independent claims.
- d. Applicant's independent claims are written with numerous contingent options such that it is difficult to follow a single straight path to a concrete result (see the rejections under 35 USC 101 and 112). It seems true that this is supported by the specification, which may be the crux of the challenge in drafting claims which can pass statutory requirements.
- e. The examination guidelines for rejections under 35 USC 103(a) are stated above and are amplified by case law which has been placed on the record in the first two Office Actions.
- f. For prior art examination purposes, with independent method claim 50 as exemplary, the examiner has eliminated the conditional claim limitations to the following claim limitations:

50. (Original) A method for processing orders comprising:

- generating a customer portal, wherein the generating a customer portal comprises a list of products and services associated with an account, a list of quotes associated with the account, a list of orders associated with the account, and a plurality of user-selectable options, and
- presenting the customer portal such that the customer portal is accessible by a user, wherein the user is a customer,

- invoking a workflow process, wherein the workflow process invokes at least one business service method, and
- the at least one business service method performs a function associated with order information pertaining to an account;
- generating a business object, wherein the generating is based on the order information; and
- transforming at least a portion of the business object into a complex object.

9. Claims 1-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esposito et al. (US Patent 6,587,838 B1) in view of Wiecha (US Patent 5,870,717).

Re. Claims 1, 19, 36 & 50, Esposito discloses a method, system, apparatus, computer readable storage medium and data signal to enable users to interact with the system over heterogeneous network environments such as a packet switched network such as the Internet and a wireless network such as a plurality of pagers. At least one vendor computer is part of the system. The vendor computer has one or more databases for storing information about products and services in a product database, and a customer database, for storing information about customers. A plurality of client computers are part of the system. Esposito explicitly discloses that his system is driven by computer software (Col. 4, l. 52 - Col. 5, l. 21). The ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious that Esposito implies or suggests that the type of software used for such a system is not critical. The ordinary practitioner would also have known that most if not all business methods systems were able to be constructed through use of a wide variety systems designs and software code, systems designs and a variety of hardware configurations. It would also have been obvious to the ordinary at the time of Applicant's invention that the compatibility problem between different computer systems, operating systems and applications software had been solved. The ordinary practitioner also would have known that specific narrow teachings were combinable and implementable for most if not all software/hardware combination systems due to the flexibility of computer programming. As such, such combinations do

not have patentable novelty. Esposito's client computers enable users to interact with the system to learn about and express interest in products and services. Thus, Esposito explicitly and implicitly discloses the processing of complex sales prospect inquiries and the complex customer purchase orders (Abstract, ll. 1-6, 9-16). Esposito discloses generic customer portals (Fig's 1-7). Esposito does not explicitly describe the construction of the software for operating the vendor's system for processing complex customer inquiries and purchase orders, such as generating a customer portal, invoking a workflow process, receiving at least one of: a service profile, quote information pertaining to an account, generating a business object, and transforming at least a portion of the business object to a complex object. However, Wiecha discloses a computer-implemented method comprising: generating a list of accounts; selecting a selected account by detecting selection of one of the accounts, wherein the selecting a selected account is performed using a computer; generating a list of orders associated with the selected account, wherein the list of orders comprises orders that have been submitted to an external provisioning system for provisioning, and the computer and the external provisioning system are communicatively coupled to one another; selecting a selected order by detecting selection of one of the orders that has been submitted for provisioning by the external provisioning system, wherein the selecting a selected order is performed using the computer; detecting a request to make a change to the selected order, wherein the request comprises a change to the selected order; incorporating the change in the selected order; submitting a re-submitted order by submitting the selected order for provisioning by the external provisioning system; and, synchronizing the re-submitted order in the external provisioning system to override the one of the orders that had been submitted for provisioning.

The steps of generating a customer portal, a work flow process receiving of information from a customer pertaining to an account, the generating of a business object, and transforming a business object to a complex object would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention because they follow the logical order establishment steps disclosed, implied and suggested by Esposito, Wiecha and well known practices in the art of order placement and order acceptance.

The work flow process and other systems design terminology in Applicant's claims limitations would have been understood by the ordinary practitioner as systems design and programming terminology. The only difference is the computer systems design terminology used by Applicant which represents systems design terminology for generic business manufacturing, since such systems have interacted with each other since the first materials computer systems into widespread use, led by Computer Associates' Ask ManMan system in the 1970's-1980's., increasingly displaced in the mid-1990's by Baan and SAP material management systems, among others, and eventually joined by Oracle's systems. The underlying software terminology such as objects appeared with these 1990's SAP and Baan systems. That terminology was objected to by users because it obscured the clear intuitive language needed by users to be efficient.. It would also have been obvious to an ordinary practitioner of the art at the time of Applicant's invention that the terminology used in the following steps is computer systems terminology describing generic business practices which are well known in the art of purchasing and customer service: generating a customer portal comprising a list of products and services associated with an account, a list of quotes associated with the account, a list of orders associated with the account, and a plurality of user-selectable options, presenting the customer portal such that the customer portal is accessible by users including customer service representatives, customers, and service providers for the customers; invoking a workflow process, and the workflow process invokes at least one business service method to perform functions associated with a selected option from among the plurality of user-selectable options; receiving at least one of: a service profile, quote information, and order information pertaining to an account; generating a business object based on the at least one of: a service profile, quote information, and order information; and transforming at least a portion of the business object to a complex object.

Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have combined the disclosures of Esposito, Wiecha and well known practices obvious to the ordinary practitioner in order to produce a method, system, apparatus, storage medium and data signal for processing orders, motivated by

a desire to provide real-time notifications to vendors of purchaser requirements in a heterogeneous network environment, and a virtual market place system that incorporates the human element in the purchase and sale transaction (Esposito, Col. 1, ll. 30-34, 60-62).

Re. Claims 2-18, 20-35, 37-49 and 51-63, neither Esposito nor Wiecha explicitly disclose the computer system steps in these dependent claims. However, the steps represent generically obvious steps of the well known order placement and order acceptance process, mixed with special terminology created by Applicant and which is defined in the specification, such as "Apply Method", Delta Method, Trim Method and Logical Delete Method, which are some of the special terms found in claim 52. Examples of other well known steps are Supplemental Orders Process in claim 53, Move Process in claim 54, and various other steps which are ordinary to the traditional order placement and order acceptance process. These steps, usually with their own terminology labels, were well known to purchasing and customer service professional users at the time of Applicant's invention through the systems provided by many enterprise software suppliers, the best known of which were SAP, Baan and Oracle. Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have combined the disclosures of Esposito, Wiecha and well known practices in order to produce a method, system, apparatus, medium and data signal for processing orders, motivated by a desire to provide real-time notifications to vendors of purchaser requirements in a heterogeneous network environment, and a virtual market place system that incorporates the human element in the purchase and sale transaction (Esposito, Col. 1, ll. 30-34, 60-62).

Response to Arguments

10. Applicant's arguments filed December 4, 2008 have been fully considered but they are not persuasive.

Applicant's arguments are essentially a repetition of previously presented arguments which have been answered on the record. Further, Applicant has failed to significantly amend the claims in a manner which would make achieve statutory compliant. As a result, the rejections under 35 USC 11 and 112 have been repeated and expanded upon.

Examples of the repetitions of previously presented arguments include all the fundamental arguments against the obviousness rejections, including the lack of a proper prima facie case, the use of impermissible hindsight, the impermissibility of combining the art of Esposito, Wiecha, challenge to the motivations for combining presented by the examiner.

Applicant's arguments also fail to properly traverse the examiner's rejections and related supplementary arguments because they primarily consist of assertions without presenting a combination of evidence and rationale such as to put the examiner's prima facie cases of obviousness into reasonable question.

Examples of Applicant's non compliant arguments include the down playing of the examiner's judgments regarding the use of programming language in the claims, the examiner's statement that such language was used in the similar order processing systems by well established suppliers of such systems such as SAS, Baan and Oracle in the 1990's. Further, Applicant has continued to argue that the use of the programming language in the claims constitutes patentably novel technology, which it is not, without presenting a reasonable combination of evidence and rationale to put the examiner's judgments into serious question. Further, Applicant failed to specifically traverse any of the examples in the dependent claims the examiner has cited for being obvious detailed order processing steps well known to an ordinary practitioner, such as

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claims 52, 53 and 54, and that such steps were routinely used by system suppliers such as SAP, Baan and Oracle at the time of Applicant's invention.

For Applicant's convenience, the requirements for proper traversal were referred to in the examiner's prior responses. They are clearly presented here as follows:

MPEP 2141, IV - TRAVERSAL
IV. APPLICANT'S REPLY

Once Office personnel have established the *Graham* factual findings and concluded that the claimed invention would have been obvious, **the burden then shifts to the applicant to (A) show that the Office erred in these findings or (B) provide other evidence to show that the claimed subject matter would have been nonobvious. 37 CFR 1.111(b) requires applicant to distinctly and specifically point out the supposed errors in the Office's action and reply to every ground of objection and rejection in the Office action. The reply must present arguments pointing out the specific distinction believed to render the claims patentable over any applied references.**

If an applicant disagrees with any factual findings by the Office, an effective traverse of a rejection based wholly or partially on such findings must include a reasoned statement explaining why the applicant believes the Office has erred substantively as to the factual findings. A mere statement or argument that the Office has not established a *prima facie* case of obviousness or that the Office's reliance on common knowledge is unsupported by documentary evidence will not be considered substantively adequate to rebut the rejection or an effective traverse of the rejection under 37 CFR 1.111(b). Office personnel addressing this situation may repeat the rejection made in the prior Office action and make the next Office action final. See MPEP § 706.07(a).

In the instant case, Applicant has failed to meet these traversal standards in the arguments received on December 4, 2008..

The examiner repeats for Applicant's convenience the Responses to Applicant's Arguments from the Final Office action mailed April 4, 2008.

ARGUMENT A: Applicant traverses the rejections of claims 1-63 under 35 USC 101. (p. 37, l. 6 - p. 40, l. 16).

RESPONSE:

Applicant's claimed invention results in "transforming at least a portion of the business object into a complex object." (claim 50, last limitation).

Independent system claim 1 results in implementing the method through the last system limitation of "the at least one of the plurality of workflow processes is configured to invoke at least one of the plurality of business service methods to perform a function associated with the selected option."

Independent system claim 19 results in "the transformation engine is further configured to generate the at least a portion of the complex object using the business object."

Independent apparatus 36 results in a "means for transforming at least a portion of the business object into a complex object."

These end results fail to meet the requirements of 35 USC 101 because they are mere software instructions which fail end in the required result. A qualifying method step result must result in a useful action which may be automated through a computer system and related apparatus, computer readable medium storing the software and related apparatus, but not merely a software modification.

ARGUMENT B: Applicant traverses the rejections of claims 1-63 under 35 USC 112-1st paragraph (p. 40, l. 18 – p. 41, l. 2).

RESPONSE: The MPEP states claims which fail to meet the requirements of 35 USC 101 automatically fail to meet the requirements of 35 USC 112-1st paragraph.

ARGUMENT C: Applicant traverses the rejections of claims 1-63 under 35 USC 112-2nd paragraph (p. 41, l. 3 - p. 42, l. 20), primarily arguing that the claimed inventions clearly performs the function processing complex orders.

RESPONSE: In spite of further modifying the claims, though only in minor ways, applicant has failed to claim a method, system, apparatus and computer medium which accomplish the processing of orders. The clearly stated accomplishment is stated in the final limitation of claim 50, and is supported by the final limitations in the other independent claims of systems and apparatus with a computer readable medium, namely to "transforming at least a portion of the business object into a complex object." (claim 50, last limitation). This is why the claims continue to not meet the requirements of 35 USC 112-2nd paragraph.

ARGUMENT D: Applicant traverses the rejection of claims 1-63 under 35 USC 103(a) (p. 43, l. 1 – p. 52, l. 25) as failing to have demonstrated that "the subject matter as a whole would have to be obvious to a person of ordinary skill in the art at the time the invention was made. See 35 U.S.C. 103(a). This requires: (!) the references must teach or suggest all of the claim limitations; (2) there must be some teaching, suggestion or motivation to combine references either in the references themselves or in the knowledge of the art; and (3) there must be a reasonable expectation of success. See MPEP 2143; MPEP 2143.03; *In re Rouffet*, 149 F.3d 1350, 1355-56 (Fed. Cir. 1998)." (p. 43, ll. 12-18).

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RESPONSE: Please see the response to Argument F below in view of the examiner's responses to arguments A-C and E.

ARGUMENT E: Applicant traverses the rejection of claims 1-63 under 35 USC 103(a) by challenging the motivation provided by the examiner in the 103(a) rejections "Applicants also respectfully submit that the Final Office Action fails to satisfy the burden of factually supporting the alleged motivation to combine the two references. The duty of factually supporting the alleged motivation to combine may not be satisfied by engaging impermissible hindsight; any conclusion of obviousness must be reached on the basis of facts gleaned from the references." (p. 49, ll. 15-19; p. 49, l. 15 – p. 51, l. 12).

RESPONSE:

Motivation to Combine and Engaging in Impermissible Hindsight: MPEP 2145 X. A. Impermissible Hindsight.

Applicants may argue that the examiner's conclusion of obviousness is based on improper hindsight reasoning. However, "[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971). Applicants may also argue that the combination of two or more references is "hindsight" because "express" motivation to combine the references is lacking. However, there is no requirement that an "express, written motivation to combine must appear in prior art references before a finding of obviousness." See *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004). For example, motivation to combine prior art references may exist in the nature of the problem to be solved (*Ruiz* at 1276, 69 USPQ2d at 1690) or the knowledge of one of ordinary skill in the art (*National Steel Car v. Canadian Pacific Railway Ltd.*, 357 F.3d 1319, 1338, 69 USPQ2d 1641, 1656 (Fed. Cir. 2004)). See

MPEP § 2143.01 <2100_2143_01.htm> for a discussion of proper motivation to combine references. (First underlining added).

In the instant case, the examiner believes that he has satisfied this standard.

ARGUMENT F: Applicant traverses the rejection of claims 1-63 under 35 USC 103(a) by asserting that the examiner " fails to present a *prima facie* case of obviousness of amended independent claims 1, 19, 36 and 50, and all claims dependent upon them, and that they are in condition for allowance." (p. 52, ll. 22-25; 1-25).

RESPONSE: Applicant repeats his general argument responded to in the last Office Action. The additional responses to Applicant's arguments presented above and an elaboration on the principles of the relevant law below are presented as a response to Applicant's over arching arguments.

As already stated on the record, Applicant has made narrowly selective quotation or paraphrase of the 2007 US Supreme Court decision named KSR for short.

The examiner repeats for Applicant's convenience a summary of relevant key points for Applicant's convenience as presented by the Board of Patent Appeals and Interferences in July, 2007:

BPAI, *Ex parte* CATAN, Appeal 2007-0820, Decided: July 3, 2007

PRINCIPLES OF LAW

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). *See also KSR*, 127 S.Ct. at 1734, 82 USPQ2d at 1391 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors

continue to define the inquiry that controls.”) The Court in *Graham* further noted that evidence of secondary considerations, such as commercial success, long felt but unsolved needs, failure of others, etc., “might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” 383 U.S. at 18, 148 USPQ at 467.

In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *id.* at 1739, 82 USPQ2d at 1395, and discussed circumstances in which

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a patent might be determined to be obvious without an explicit application of the teaching, suggestion, motivation test.

In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248.” *KSR*, 127 S.Ct. at 1739, 82 USPQ2d at 1395 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12, 148 USPQ 459, 464 (1966) (emphasis added)), and reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* The Court explained:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

Id. at 1740, 82 USPQ2d at 1396. The operative question in this “functional approach” is thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

The Supreme Court made clear that “[f]ollowing these principles may be more difficult in other cases than it is here because the claimed subject matter may involve more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement.” *Id.* The Court explained, “[o]ften, it will be

necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740-41, 82 USPQ2d at 1396. The Court noted that “[t]o facilitate review, this analysis should be made explicit. *Id.* (citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). However, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 1741, 82 USPQ2d at 1396.

In the instant case, the examiner has followed the Supreme Court’s upholding as cited above of the guidelines offered in the circuit Court’s *In re Kahn* opinion presented assessments of what the ordinary practitioner of the art would have known and would have derived by common sense at the time of Applicant’s invention. Applicant is referred to the prior art references and rationale presented in the above rejections. The examiner has not made “mere conclusory statements”, but has instead provided “rational underpinning to support the legal conclusion of obviousness”. As stated above, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim. Instead, the examiner has taken into account “the inferences and creative steps that a person of ordinary skill in the art would employ” by combining two prior art references with related rationale regarding what one of ordinary skill would have known and found obvious at the time of Applicant’s invention. As such, the examiner considers that the above rejections meet the standards of a properly made *prima facie* case of obviousness rejection. The MPEP establishes a bar for Applicant to overcome in traversing the examiner’s prior art references and rejection rationale. The examiner maintains the opinion that Applicant’s arguments fail to meet the requirements of that bar for a proper traversal.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner’s supervisor, Charles Kyle, can be reached on (571) 272-6746.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington D.C. 20231

or Faxed to (571)273-8300 [Official communications; including After Final communications labeled "Box AF"]

or Faxed to (571) 273-6792 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the address found on the above USPTO web site in Alexandria, VA.

SEC
March 14, 2009

/Narayanswamy Subramanian/
Primary Examiner, Art Unit 3695